INTERNATIONAL SEARCH REPORT

In: Itional Application No PCT/EP2004/012167

BLOI AVAILABLE COPY

PC 7 CO7C253/34 CO7C A. CLAS: C07C255/03 B01D61/36 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 CO7C B01D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, CHEM ABS Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category 9 1-7. US 6 395 142 B1 (WESTERMANN DONALD H ET Α 12-15 AL) 28 May 2002 (2002-05-28) cited in the application column 4, lines 3-51 claims 18,27,46 US 5 110 475 A (ROESSLING GEORG ET AL) Y 1-7, 12 - 155 May 1992 (1992-05-05) claim 4 DATABASE WPI 1-7, 12-15 Section Ch. Week 200317 Derwent Publications Ltd., London, GB; Class E19, AN 1997-327573 XP002277208 & JP 03 372412 B (MITSUBISHI JUKOGYO KK) 4 February 2003 (2003-02-04) abstract -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. X Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled *O* document referring to an oral disclosure, use, exhibition or other means in the art. document published prior to the international filing date but *&* document member of the same patent family later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the international search 2 0. 06. 2005 23 May 2005 **Authorized officer** Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Goetz. G Fax: (+31-70) 340-3016

INTERNATIONAL SEAUCH MELONI

Interpretation No PCT/EP2004/012167

| | ation) DOCUMENTS CONSIDERED TO BE RELEVANT | |
|-----------|--|-----------------------|
| ategory ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| (| EP 0 890 572 A (THE STANDARD OIL COMPANY) 13 January 1999 (1999-01-13) claim 1 | 8-15 |
| (| EP 0 937 707 A (THE STANDARD OIL COMPANY) 25 August 1999 (1999-08-25) claim 5 | 8-15 |
| X | DATABASE WPI Section Ch, Week 197931 Derwent Publications Ltd., London, GB; Class A41, AN 1979-000350 XP002285644 & RO 64 887 A (COMB PETROCH PITEST) 30 August 1978 (1978-08-30) abstract | 8-15 |
| | | |
| | | |
| | | |

INTERNATIONAL SEARCH REPORT

ernational application No. PCT/EP2004/012167

| Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) |
|--|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: |
| 1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: |
| Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). |
| Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) |
| This International Searching Authority found multiple inventions in this international application, as follows: |
| see additional sheet |
| 1. As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims. |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.: |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report Is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: |
| Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees. |

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7 (complete) and 12-15 (in part)

Process for purifying an acetonitrile feedstock comprising steps A), B), and C) whereby step B) consists of a pervaporation step

2. claims: 8-11 (complete) and 12-15 (in part)

Process for purifying an acetonitrile feedstock comprising steps A'') and C'') whereby the peryaporation step B) is missing and whereby different pressures are used in the steps A'' and C''

INTERNATIONAL SEARCH REPORT

nformation on patent family members

PCT/EP2004/012167

| | | | 101/21200. | | | |
|---|-----------------|------------------|------------|-------------------------|------|------------------|
| Patent document cited in search report | | Publication date | | Patent family member(s) | | Publication date |
| US 6395142 | B1 | 28-05-2002 | AU | 1632501 | Α | 23-04-2001 |
| | | | EP | 1237638 | | 11-09-2002 |
| | | | JΡ | | T | 19-08-2003 |
| | | | WO | 0127120 | | 19-04-2001 |
| | | | ÜS | 6508917 | | 21-01-2003 |
| US 5110475 | A | 05-05-1992 | DE | 3934656 | A1 | 18-04-1991 |
| | | | AT | 127708 | | 15-09-1995 |
| | | | ΑU | 648043 | | 14-04-1994 |
| | | | AU | 6460090 | | 18-04-1991 |
| | | | CA | 2027527 | A1 | 14-04-1991 |
| | | | WO | 9105599 | | 02-05-1991 |
| | | | DE | 59009658 | | 19-10-1995 |
| | | | DK | 451236 | | 05-02-1996 |
| | | | EP | 0451236 | | 16-10-1991 |
| | | | ES | 2079490 | | 16-01-1996 |
| | | | FΙ | 103953 | | 29-10-1999 |
| | | | GR | 90100751 | | 20-03-1992 |
| | | | HU | 57632 | | 30-12-1991 |
| | | | ΙE | 903653 | | 24-04-1991 |
| | | | JP | 4502124 | | 16-04-1992 |
| | | | NO | 912260 | | 12-06-1991 |
| | | | PT | 95576 | A .B | 13-09-1991 |
| | | | US | 5593687 | | 14-01-1997 |
| JP 3372412 | - - B | 20-05-1997 | JP | 3372412 | B2 | 04-02-2003 |
| | | | JP | 9131516 | Α | 20-05-1997 |
| EP 0890572 | Α | 13-01-1999 | EP | 0890572 | | 13-01-1999 |
| | | | DE | 69707848 | | 06-12-2001 |
| | | | DE | 69707848 | | 04-04-2002 |
| | | | ES | 2166952 | T3 | 01-05-2002 |
| EP 0937707 | Α | 25-08-1999 | BG | 103188 | | 30-12-1999 |
| | | | BR | 9900414 | | 02-05-2000 |
| | | | CN | 1231282 | | 13-10-1999 |
| | | | DE | 69906848 | | 22-05-2003 |
| | | | DE | 69906848 | | 30-10-2003 |
| | | | EP | 0937707 | | 25-08-1999 |
| | | | ES | 2197578 | | 01-01-2004 |
| | | | JP | 11286473 | | 19-10-1999 |
| | | | RU | 2230733 | | 20-06-2004 |
| | | | TR | 9900385 | | 21-09-1999 |
| | | | TW | 422830 | | 21-02-2001 |
| | | | ษร | 6326508 | | 04-12-2001 |
| | | | ZA | 9901401 | Α | 23-08-1999 |
| RO 64887 | Α | 15-12-1978 | RO | 64887 | | 15-12-1978 |